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JC923 U.S. PTO

JC971 U.S. PTO

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*This application is
qualified as Small Entity*

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BE IT KNOWN that We, **Sam ZHADANOV and Eli
ZHADANOV**, have invented certain new and useful improvements in

**A DEVICE FOR HOLDING A HAND-HELD SHOWERHEAD
AND THE LIKE**

of which the following is a complete specification:

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SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide a device for holding a hand held showerhead which is a further improvement of the existing devices.

In keeping with these objects and with others which will become apparent herein after, one feature of present invention resides, briefly stated in a device for holding hand-held showerhead comprising an attaching element attachable to a surface; a holding element turnable relative to said attaching element; and means for fixing said holding element relative to said attaching element in any of a plurality of positions of said holding element, said fixing means including a plurality of formations formed on one of said attaching element and said holding element and at least one counter formation formed on the other of said attaching element and said holding element and engageable with any of said first mentioned formations so as to fix said holding element relative to said attaching element in a corresponding position.

When the device for holding a hand held showerhead is designed in accordance with the present invention it improves the existing devices by

simple and reliable holding and fixing of the showerhead in the device in any desired position.

The novel features which are considered as characteristic for the present invention are set forth in particular in the appended claims. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of specific embodiments when read in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Figures 1, 2 and 3 are a side view, a plan view and an end view of the device for holding a hand held showerhead in accordance with the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

A device for holding a hand held showerhead and the like in accordance with the present invention has an attaching element which is attachable to a surface and is composed in the shown embodiment of an attaching member 1 and an intermediate member 6. An attaching element 1 has an inner elastic element 2 formed for example of rubber or plastic, and an insert 3 provided with a rod 4 which has an opening 5. The intermediate element 6 has side walls 8 and 9 which are connected with one another at one end by a partition 10 which forms an abutment in an operative position of the device. They are also connected with one another at the other end by a side wall 11 which carries a sector 12 with a plurality of formations formed for example as teeth. The intermediate element 6 has openings 13 and 14, in which pins 7 and 15 are inserted. The pin 7 forms an axle for turning of the intermediate member 6 relative to the attaching member 1, while the pin 15 forms an axle of turning of a holding element 16 relative to the intermediate element 6.

The holding element 16 has side walls 17 and 18 and an opposite part 19 provided with a tubular passage, which can be cylindrical or conical. One part of the periphery 20 of the tubular passage is open. The opposite wall 21 of the peripheral passage has a slot which forms a flat spring 22 having an

inner cylindrical or conical surface. The opposite side of the flat spring 22 has a formation formed for example as a tooth 23. The sector 12, in turn has a plurality of teeth 24 spaced from one another by a plurality of gaps.

The device for holding a shower head operates in the following manner.

First of all, the attaching member 11 is placed against a surface in any position around its axis, and then the intermediate member 6 is turned around the axle 7, the intermediate element 6 is turned from the position 0 to the position C, and the side walls 8, 9, and the rounding 25 which serves as a cam, through the rod 4 and the insert 3 connected with the element 2 creates a vacuum in the attaching element 1. It is to be understood that the intermediate element 6 can be connected to a wall not necessary through the vacuum attaching element 1, but other attaching means can be used as well.

The holding element 16 is turned around the axle 15, so that the tooth 23 leaves one gap between the teeth 24 with simultaneous deflection of the flat spring 22 into the tubular passage, and the tooth 23 engages into another gap between the other teeth 24. Thereby the holding element 16 is fixed in one of a plurality of turning positions relative to the attaching element 1, 6. When a

showerhead 26 is inserted inside the tubular passage of the holding element 16, it prevents deflection of the flat spring 22 with the tooth 23 and therefore fixes the corresponding angular position of the holding element 16 relative to the attaching element 1.6, or in other words a position of the showerhead relative to the surface, such as a wall and the like.

The inner passage in the part 19 of the holding element 16 can be also conical so that the showerhead 26 is firmly fixed inside it.

It will be understood that each of the elements described above, or two or more together, may also find a useful application in other types of constructions differing from the types described above.

While the invention has been illustrated and described as embodied in a device for holding a hand-held showerhead and the like, it is not intended to be limited to the details shown, since various modifications and structural changes may be made without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily

adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed as new and desired to be protected by Letters Patent is set forth in the appended claims.

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